Parents' Use of Music with their Infants: The Roles of Parents' Beliefs and Musical Background

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By

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Abstract

The purpose of this research was to unite music and parenting, both societal functions of great significance and worth, in an effort to understand how they relate to each other. Specifically, the goal was to examine relations between infant music exposure and parents' beliefs regarding the importance of music as well as their own musical background. Data were collected as a part of the New Parents Project, a short term longitudinal study of the transition to parenthood. Parents who met all project requirements participated in four separate phases. The data that were used for the current study were taken from answers to specific questions administered 3 months postpartum. Both the frequency with which new parents expose their young infants to music as well as the various types of music parents expose their children to was examined. I further examined relations between infant music exposure and parents' perceptions of (a) the importance of music for their child's development and (b) parents' own musical background. I hypothesized that parents with more extensive musical backgrounds and stronger beliefs regarding the importance of music to a child's development would be more likely to expose their child to more forms and types (genres) of music. After analyzing the data, I found that parents are indeed using music quite frequently with their infants. Furthermore, the current study suggests parental beliefs and musical background may both be important to the variety of music that infants receive. Specifically, the beliefs of both mothers and fathers seem to be important to the amount of musical variety infants are exposed to, however, it seems that the father's background may be more influential than the mother's in predicting the variety of forms and types the infants are exposed to.

Parents' Use of Music with their Infants: The Roles of Parents' Beliefs and Musical Background

Music has long been of cultural significance in every area of the world. The effects of music travel across every socio-economic status and geographic border, uniting people with a common passion. Many would assert that the value of music to a society is immeasurable. It is near impossible to put into words the emotional and psychological effects that music can have on even the untrained listener. With music being such an integral part of society, it is no wonder that children are exposed to it both directly and indirectly from the time of conception.

Like music, parenting has been around as long as humans have been. With both parenting and music being such important parts of any society's daily life, it would be surprising if there was not an overlap of the two. Some parents may simply enjoy music themselves and thus intentionally or unintentionally expose their children to music. Other parents take the raising of their children very seriously and are thus willing to try many different techniques for soothing and stimulating their children, including the use of music.

In fact, parents are oftentimes willing to go to great lengths to put their children ahead of their cohorts. Programs, toys, and games abound that claim to be mentally stimulating and challenging, and parents are willing to pay highly for them. Recently, people have bought into the idea that playing Mozart music for their children will make their children smarter. Not only has "Mozart for Babies" been popular on the market, but the programs have targeted other age groups as well. In a society where the best and brightest are lauded and envied, it would seem that parents are willing to try almost anything to increase their child's intelligence.

As a consequence of the recent focus on music and parenting, researchers have investigated infants' abilities to perceive music as well as parents' use of music with their infants. The purpose of this study was to examine the frequency with which new parents expose

their young infants to music and the various types of music they play for their infants. I further examined relations between infant music exposure and parents' perceptions of (a) the importance of music for their child's development and (b) parents' own musical background.

Music and Infant Development

Infants are able to connect to music and are very much so affected by it. Naturally, it is difficult to gauge exactly how infants relate to music and to what degree they are affected by its use around them. Research has shown that children even as young as 6 and 7-months-old are able to remember previously introduced music. It is possible to make this claim because infants show greater interest in novel songs than ones that have been previously introduced to them (Volkova et al., 2006). Sandra Trehub has devoted much time to examining music's place in human development (2003). She asserts that prelinguistic infants are capable of noticing specific melodic changes in a piece or song. Trehub even goes as far as to say that infants can discern technical differences on a similar level to that of untrained listeners who have been around music for years.

Support to the claim that infants are affected by music comes from various studies, a number of which have focused on maternal singing. One of the more pivotal and well-known studies to support the argument that music is extremely important to infant development was conducted by Tali Shenfield, Sandra Trehub, and Takayuki Nakata. Shenfield et al. measured cortisol levels in the saliva of infants to determine their arousal level after being exposed to maternal singing (2003). The researchers had the mothers sing to their infants for ten minutes before interacting with them for another ten minutes. After analyzing the cortisol levels, they found that infants having lower baseline levels showed significant increases as a result of the maternal singing, whereas infants having higher baseline levels showed reductions in cortisol.

Cortisol levels have been shown to be related to stress levels. For example, soothing music can lower heightened cortisol levels. Similarly, higher levels of cortisol are noted when infants are aroused or introduced to stressful stimuli. Thus, playful maternal singing may help infants reach an optimal state of arousal (2003).

This concept of maternal singing and parent/child bonding through it is a topic deserving much attention. Infants depend upon their parents (especially mothers) to help and guide them in situations of emotional distress (Milligan et al., 2002). Infants are highly attuned to their mother's pitch variation, repetitiveness, and other vocal traits that are characteristic for mothers when talking to their infants. The Milligan et al. study examined the correlation between maternal attachment style and level of emotional involvement in mother/infant interaction. The reason that this particular relationship was studied was because the emotional development of infants is affected by mothers' emotional style and availability. The finding of the study was that all mothers, regardless of maternal attachment classification, were more expressive when singing to their infants (2002). Clearly, music can facilitate deeper levels of bonding between parent and child. It is obvious that music is at the very least critically important for an infant's social and relational development.

Parents' Beliefs and Infant Music Exposure

From both live and recorded music to musical toys, television, etc., it is clear that infants are exposed to music in many ways (Young et al., 2007). Thus the question is not whether or not infants are listening to music. A better question is why some infants are exposed to music more frequently and exposed to a greater variety of music than others are. One explanation may involve parents' beliefs regarding the importance of music for children's development.

Young et al. examined parents' notions about music before designing their Music One-to-One approach in an effort to relate up-and-coming interest in the topic to practice, with the "implication of benefits to early communicative competence" (2007, p. 257). After consulting parents in addition to various experts in the field of infant musicality and music in general, Young et al. determined that many parents view music as a bonding opportunity with their children (2007). This conviction could be part of the reason that infants are exposed to music in such a wide variety of ways, including television programs, toys, live and recorded music, etc.

Custodero and Johnson-Green (2008) examined how parents used music across four domains of caregiving/parenting: nurturant, material, social, and didactic. Music was considered to be nurturant if it was used to help with fundamental physical care. Music was considered social if used to aid in communication or foster relationships. Didactic music use was music used for teachable moments, and material music use entailed parents utilizing music as a tool in raising their child. Custodero and Johnson-Green found that the social domain contained the most examples of music use. Apparently parents are using music to relate to their infants, as music can be a means of enhancing social relations.

Also worth noting are the findings of Beatriz Ilari in her 2004 study of beliefs regarding music and the resulting interactions between mothers and their children. Mothers/caretakers of infants between seven and nine months old were interviewed for the study. Several common beliefs emerged from the group of mothers. One of the most salient beliefs was that appropriate music for infants does exist, as 72% of the mothers agreed with this statement; however, there was not a general consensus as to what the definition of "appropriate" would be. Another point that many mothers agreed upon was that musical activities are best in response to the infant's

mood. Many mothers look to how the infant is feeling or behaving to determine if music should be played at all, and if so, what type of music would be most appropriate.

Does Parent Musical Background Matter?

In examining the type of parents that are consciously exposing their children to music, it is of interest to look at the parents' musical background and see if there is a correlation between level of musical knowledge or experience and the amount of musical play and exposure the infants are receiving. According to Ilari (2004), parents who have greater musical backgrounds and more music familiarity are more likely to engage in musical activities with their infants later. More specifically, mothers with prior musical experience are more likely to listen to music with their infants. Also interesting to note is that mothers with a history of ensemble participation were more likely to listen to classical music instead of pop music, which could also be a factor in infant preferences (Ilari, 2004).

Similar to the Ilari study findings are those of the Custodero and Johnson-Green study (2003). After analyzing the collected data, they found musical experience to be highly related to a higher frequency of singing and playing. This conclusion was reached after extensive telephone interviewing from a randomized sample of eligible participants. A difference that may or may not be important in the results of this study compared to the Ilari study is that the Ilari study found that there was not a significant difference between mothers with musical experience and those without when it came to maternal singing (2004).

As interesting as it is to examine musical influence on parenting styles, relatively little is known on the subject due to the very nature of it. Much of parent-to-child music interaction is done privately in the home. Many parents may be completely unaware of how often they use

music around their infants, so ingrained is music in everyday society (Custodero & Johnson-Green, 2008).

The Present Study

Given the cultural significance of music as well as its potential for tremendous impact in the development of children, this topic is worthy of attention. The goal of the present study was to examine possible relations between infant music exposure and parents' perceptions of the importance of music for their child's development as well as parents' own musical background. Data from the New Parents Project were used. The New Parents Project is a study of couples expecting their first child that follows these new families across the transition to parenthood. When their infants are 3 months old, parents are asked a series of questions about their infant's exposure to music, their beliefs about the importance of music for their child's development, and their musical background.

A notable aspect to the design of the present study is the equal attention given to fathers. Much of the current literature regarding music's use with infants is focused on the mother's use of music. Using data from the New Parents Project, however, I was able to separate the responses of the mothers from fathers to approach the topic in a unique way. Also, the present study seeks to find out how parents intentionally use a wide variety of music with their infants. This topic is another one that has received little attention in the current research. I hypothesized that parents with stronger beliefs regarding the importance of music for their child's development and with more extensive musical backgrounds would be more likely to intentionally use music in interactions with their infants and would be more likely to provide their infants with a greater variety of musical experiences.

Method

Participants and Data Collection

Participants for the New Parents Project were couples expecting their first child residing in the greater Columbus, Ohio area. To be eligible for the study, both partners had be employed full-time, at least 18 years old, able to read and speak English, and the biological parents of the child they are expecting. Couples could be either be married or cohabiting. Participants were recruited from childbirth education classes as well as newspaper advertisements.

The study was designed to take place in four phases. The first phase of the study took place during the third trimester of pregnancy; the second phase took place when the infants were 3 months old, the third phase when they were 6 months old, and the fourth and final phase when they were 9 months old. At each phase, parents completed surveys about their personal characteristics, relationships and parenting, and were interviewed about their daily lives. For the purpose of this study, I used data from Phase 2 of the study, for which mothers and fathers complete a series of questions regarding their use of music with their infants.

Data came from 156 couples (156 mothers and 156 fathers). Of the fathers, 68.4% of them had obtained at least a Bachelor's degree. 77.3% of the mothers had earned at least their Bachelor's degree. The fathers' ages ranged from 20 to 51 years (M = 31) and the mothers' ranged from 19 to 41 years (M = 29). Of the fathers, 85.9% were White, 3.8% were Black, 2.6% were Asian, 4.4% reported other races, and 3.2% were missing race information. Of the mothers, 88.5% were White, 3.2% were Black, 1.9% were Asian, 5.1% reported other races, and 1.3% were missing race information. Other races that people reported included Pacific Islander, Mixed Race, and Other. Median family income, as reported by mothers, was $80,000/year.

Measures

I developed various questions for the survey to try and gauge factors such as parental beliefs, musical background, and their use of music with their infants. The complete set of questions about music is included in the Appendix. The following question was meant to assess how important mothers and fathers think music is to their child's development: "How important do you think music is in the development of your child?" (1 = *Not at all Important*; 4 = *Very Important*). The musical background question had categories ranging from *No Formal Training* to *Professional Musician* and included qualifications such as *I can Read Music* or *I have Performed in a Formal Setting*.

The next questions assessed how often parents used music with their infants. The first question was about current frequency of exposure: "How often do you intentionally expose your baby to music?" (1 = *Never*; 5 = *Multiple times a day*). In addition to this question, the parents also answered the following question: "Did you intentionally expose your child to music before he/she was born?" (*Yes* or *No*).

The other questions sought to establish an understanding of the specific ways that the infants are being exposed to music (see Appendix). To gather an understanding of the infant's overall musical experience, I asked parents about the different forms and types of music that they exposed their infants to. Different forms included, but were not limited to, singing, live music, recorded music, and musical toys. Different types (or genres) of music included, but were not limited to, classical, country, jazz/blues, rock/alternative, children's, world/ethnic, folk, gospel, and rap/hip-hop.

The process of describing the infants' overall musical experiences consisted of two separate parts. I ran correlations using the sum of the number of forms to analyze relationships

between beliefs and background to the variety of forms. I also did the same thing with the number of types of music that parents reported. I did not add the forms and types together, but I instead looked at how beliefs and background influenced the variety of forms and types separately.

Results

Descriptive Analyses

To put it simply, it would seem that parents were exposing their infants to music, and it would also seem that it was happening fairly frequently (Figures 1 and 2). Most mothers and fathers reported that their infants were being exposed to music at least once a day. In fact, only a very small percentage (3.2%) of fathers reported that their infant was never exposed to music. No mothers reported this level of frequency, though. In addition to this sample's overall high level of exposure, it would seem that infants were being exposed to a fairly wide variety of music. A majority of infants were being exposed to recorded music, musical toys, and their own parents' voices. By contrast, only about one-fourth of the sample reported that their infant was being exposed to live music (Figure 3). Infants were also being exposed to multiple types/genres of music. It appears that the three most popular types of music that parents reported their infants hearing are rock/alternative, classical, and children's music (Figure 4). Interestingly, mothers reported higher levels of infant exposure than fathers to all forms of music except three: rock/alternative, jazz/blues, and folk music.

Based on results from the musical background section, it would also seem that the parents were fairly adroit in the world of music (Figure 5). Roughly one-third of the fathers reported being able to read music, 24% claimed to play an instrument with proficiency, and 54% have had

musical instruction at some point. The mothers were equally, if not more adept as musicians. Roughly 50% of the mothers reported being able to read music. Just under one-third of the mothers reported that they can play an instrument with proficiency. But 67% of mothers reported having had musical instruction. These levels of music proficiency could very well be influencing the high levels of frequency that infants are being exposed to music.

Primary Analyses

My first hypothesis was that parents with stronger beliefs regarding the importance of music for their child's development would be more likely to intentionally use music in interactions with their infants and would be more likely to provide their infants with a greater variety of musical experiences. With respect to the first part of this hypothesis, I computed Pearson correlations between the beliefs questions and the frequency of exposure questions for mothers and fathers. For both mothers and fathers, their beliefs regarding the importance of music for their child's development were positively and significantly associated with their reports of the frequency with which they exposed their infants to music (see Table 1). Specifically, when mothers believed music was important to their child's development they reported more frequent music exposure, $r = .44$, $p < .01$, and the same held for the association between fathers' beliefs and their reports of infant music exposure, $r = .55$, $p < .01$.

I also used *t*-tests to compare parents who did vs. did not expose their child to music prior to birth on their beliefs regarding the importance of music to their child's development. Mothers who intentionally exposed their infants to music prior to birth reported stronger beliefs in the importance of music ($M = 3.57$) than mothers who reported not exposing their infants to music prior to birth ($M = 3.06$; $t(152) = 5.58$, $p < .01$). Similarly, fathers who intentionally exposed their infants to music prior to birth also reported stronger beliefs in the importance of music ($M =$

3.36) than fathers who reported not exposing their infants to music prebirth (M = 2.80, $t(154)$ = 4.50, $p < .01$).

With respect to the second part of my hypothesis, I computed correlations between the beliefs question and (a) the number of forms of music exposure indicated by the parent (with high scores indicating a greater variety of forms), and (b) the number of types of music the parent said the child is exposed to (again, with high scores indicating a greater number of types; see Table 1). I expected that parents with stronger beliefs about the importance of music for children's development would be more likely to use a greater number of forms and types of music with their infants. I found that mothers' beliefs were positively (and significantly) correlated to the number of forms (r = .24, $p < .01$) but not number of types of music they used with their infants. For fathers, their beliefs were positively and significantly correlated to both the number of forms (r = .28, $p < .01$) and number of types (r = .25, $p < .01$) of music they reporting using with their infants. Fathers' beliefs appear to be slightly more influential for both parents as their beliefs were positively and significantly correlated to the number of forms *and* types for mothers as well as for themselves.

Recall that my second hypothesis was that parents with more extensive musical backgrounds would be more likely to intentionally use music in interactions with their infants and would be more likely to provide their infants with a greater variety of musical experiences. I hypothesized this correlational relationship because I thought that these parents (those with more extensive backgrounds) would want to share that part of their lives with their infant and perhaps prime them to appreciate or even play music themselves in the future. I found that both mothers and fathers with more extensive musical backgrounds are indeed more likely to have more frequent musical interactions with their infants. For the mothers, r = .23 with $p < .01$, and for the

fathers $r = .25$ with $p < .01$. Thus, it would seem that parents' musical background may influence the frequency of musical interactions they have with their infants.

Mothers with more extensive musical backgrounds ($M = 2.18$) were significantly more likely to intentionally expose their infants to music prior to birth than mothers with less extensive musical backgrounds ($M = 1.49$; $t(152) = 2.46$, $p < .05$). In contrast, fathers who reported exposing their infants to music prior to birth had a higher mean score on musical background ($M = 1.75$) than fathers who reported not exposing their infants to music prior to birth ($M = 1.40$), but the difference between the groups of fathers was not statistically significant.

Mothers' backgrounds were only significantly correlated to the number of types of music that mothers used with their infants ($r = .21$, $p < .01$). However, the fathers' backgrounds were positively and significantly correlated to the number of forms ($r = .28$, $p < .01$) and types ($r = .23$, $p < .01$) of music used by mothers as well as their own number of forms used with their infants ($r = .26$, $p < .01$). These numbers would make it appear that the father's background is more important than the mother's background to the variety of forms and types of music the infants are exposed to.

Discussion

Current literature mostly focuses on mothers' musical interactions with their children. This study not only took a fairly expansive view of parental use of music, examining multiple factors and associations, but it also is one of the first studies to single out fathers and look at how the musical environments fathers provide for their infants may be influenced by fathers' musical background, beliefs, and practices. The survey created for this study aimed to examine multiple facets of the musical experience that parents share with their infants as well as multiple factors

that may be influencing the quality/diversity of these experiences. More specifically, this study tried to examine more forms of music than the already fairly frequently studied topic of maternal singing. There are many more ways that parents can interact musically with their infants, and this study sought to begin to tap into this variety.

After examining data from 156 couples, some significant correlations arose as did some general trends that are quite interesting. First of all, it would seem that parents as a whole are using music with their infants, and many of them are doing it quite frequently. Over half of all mothers and fathers reported that their infants are exposed to music at least once a day. It would also appear that as a whole, infants are being exposed to a wide variety of types of music as well as forms. A vast majority of infants are being exposed to their parents' singing, musical toys, and recorded music. Interestingly, a high percentage of fathers report singing to their infants. I expected a high percentage of mothers to report singing to their infants (which held true at 97%), but I was surprised by the high percentage of fathers that reported singing to their infants (86%).

Although live music seems to be present for a smaller number of infants, roughly one fourth of the infants are being exposed to this form of music. Live music may have been interpreted broadly – for example, as attending concerts or as a parent playing music themselves for their infant, so future research could explore more specifically the types of live music that infants are exposed to. Infants also appear to be exposed to a wide variety of types or genres of music. Mothers reported somewhat greater exposure of infants to classical, Children's, country, world/ethnic, rap/hip hop, and gospel than fathers did. Interestingly, though, there were three categories in which fathers reported greater exposure than mothers: rock/alternative, jazz/blues, and folk music. This raises the question of why fathers have a higher report for these three genres, when mothers have higher reports for all other types and forms. Perhaps fathers are

using music to relate to their infants, choosing music that they themselves are most interested in and playing it. Custodero and Johnson-Green's four domains of parent/child music interaction include social and didactic (2008). Perhaps fathers are engaging in social music sharing, trying to share their interests and preferences with their infants, and mothers are then more likely to engage in a didactic musical encounter, trying to create a teachable moment (thus the higher percentage of classical and children's music reports). As predicted, it would seem that both the mothers' and the fathers' beliefs are important to the variety of forms and types of music that infants are exposed to.

Recall that my hypotheses were that parents with stronger beliefs regarding the importance of music to their child's development as well as parents with more extensive musical backgrounds would be more likely to expose their infants to music and to a greater variety of music. A "greater variety" of music was determined by the number of forms and the number of types that infants were exposed to. The data received and analyzed seem to support these hypotheses. Beliefs of both mothers and fathers seem to be very important in the number of forms and types of music infants are exposed to. Regarding musical backgrounds, mothers with stronger musical backgrounds were significantly more likely to expose their infants to music prebirth. Even though the same thing could not be said of fathers, this difference could make sense through the simple fact that mothers carry the infant and fathers have significantly less time with/influence on the developing baby. Also recall that both mothers and fathers who reported intentionally exposing their infants to music before birth had more extensive musical backgrounds. These same parents, the ones with more extensive backgrounds also were significantly more likely to give their infants a higher frequency of music exposure.

However, when examining the role that parental background plays in the variety of music exposure infants receive, it would seem that the father's background plays a bigger role than the mother's background does. This difference in importance of background would imply that the fathers' musical background is something that is worthy of further study. Recall that parents with more extensive musical backgrounds are more likely to use music in interactions with their infants (Ilari, 2004). Ilari's study (2004) then went on to examine the link that mothers' musical backgrounds had to the types of musical interactions. However, if the father's background could be more important, then this topic is certainly worth studying.

Limitations and Implications for Future Research

There are some possible limitations to this study and some aspects that should be changed if the study were to be redone. One of the greatest limitations may come from the demographic statistics of the sample. A vast majority of the sample was White, so minorities are underrepresented. In addition, the sample is very educated for the most part. Over 68% of the fathers and 77% of the mothers have obtained at least a Bachelor's degree. Parenting styles may be linked to these educational and/or cultural differences in the sample group. Also, if parents are from higher SES backgrounds, this may have something to do with the seemingly high levels of musical experience, if they are coming from more privileged backgrounds where there may have been a greater emphasis on music in their education and upbringing. In addition, some of parents' reports may be inaccurate. For example, a seemingly high percentage of mothers and fathers reported being able to read music (Figure 5). Perhaps not all of these parents can currently read music, which may make a difference in the actual extent of current musical background, and could have affected the results of this study.

Also, parents reported the forms/types/frequency that their infants are exposed to music. It would be impossible to know whether the parents were reporting just for themselves or for their partner as well. With the vague wording of the questions, they could very easily be interpreted as a report for any musical exposure the infant receives. The one aspect that one could likely look at independently would be the form of "your own singing." This qualification makes it likely that the mothers and fathers reported just for themselves, while on all of the other forms they may have reported on forms that their partner used, whether or not they also used that form in interactions with their infant.

Future research should examine specific interactions parents have with their infants that include music. It would be beneficial and interesting to know how and why parents choose to use music with their infants. It would also be critically important to find out how parents use music when they are alone with their infants, as well as if that type of interaction changes when their partner is also around. Even more specifically, future research should focus on fathers and their use of music in interactions with their infants. Current research seems to center around mothers, but as can be seen in some of the figures, fathers are reporting the use of music almost just as often as mothers in almost all cases. This special relationship and interaction seems to be getting neglected in current research, but understanding fathers' use of music with their infants could be extremely beneficial, especially since it seems like the fathers' background is more influential with the variety of forms and types of music the parents report using.

As has been evidenced by multiple studies and research initiatives, infants are very much so affected by music, and parents are intentionally using music in their interactions with them. As music is so influential to so many people and is such an integrated part of society, this

connection is logical. Thus, it makes sense to learn as much about the relationship between infant music exposure and parental influence as possible.

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Tables & Figures

Table 1

	M Forms	M Types	M Frequency	F Forms	F Types	F Frequency
M Beliefs	.24**	.10	.44**	.33**	.25**	.17*
M Background	.08	.21**	.23**	.14	.11	.08
F Beliefs	.21**	.19**	.17*	.28**	.25**	.55**
F Background	.28**	.23**	.14	.26**	.07	.25**

Note. M indicates Mother and *F* indicates Father.

** = $p < .01$ * = $p < .05$

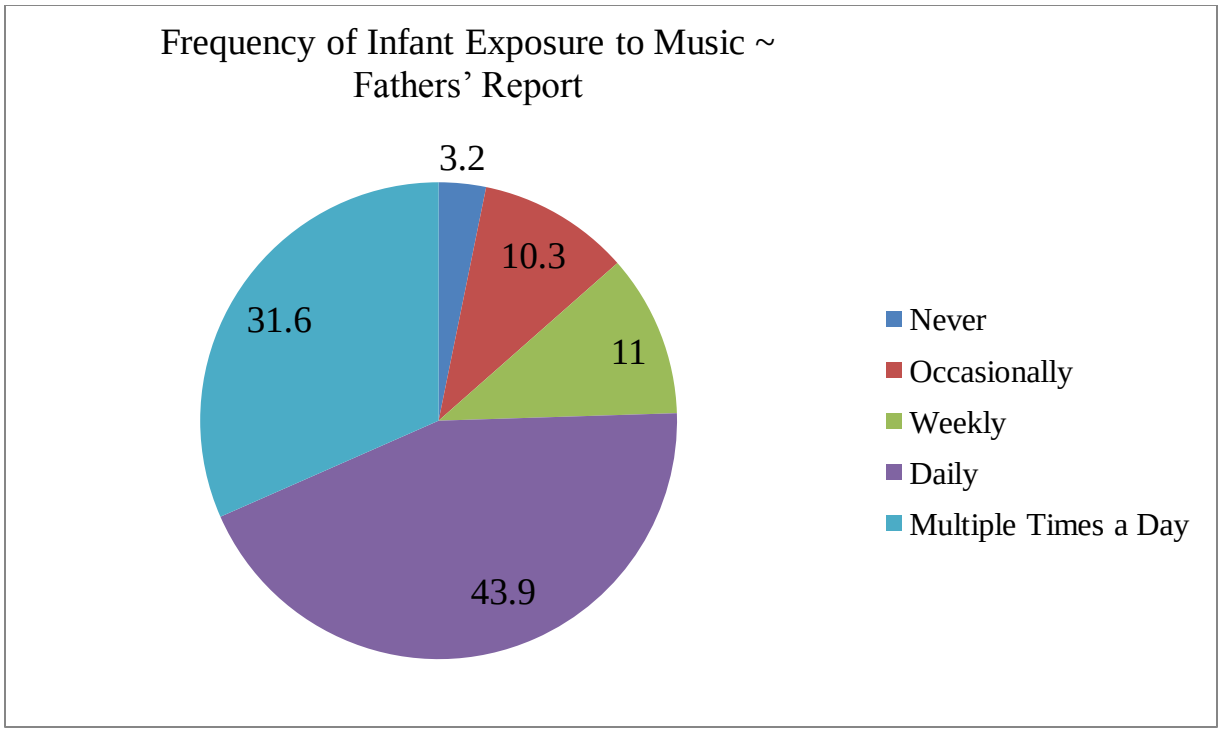

Figure 1

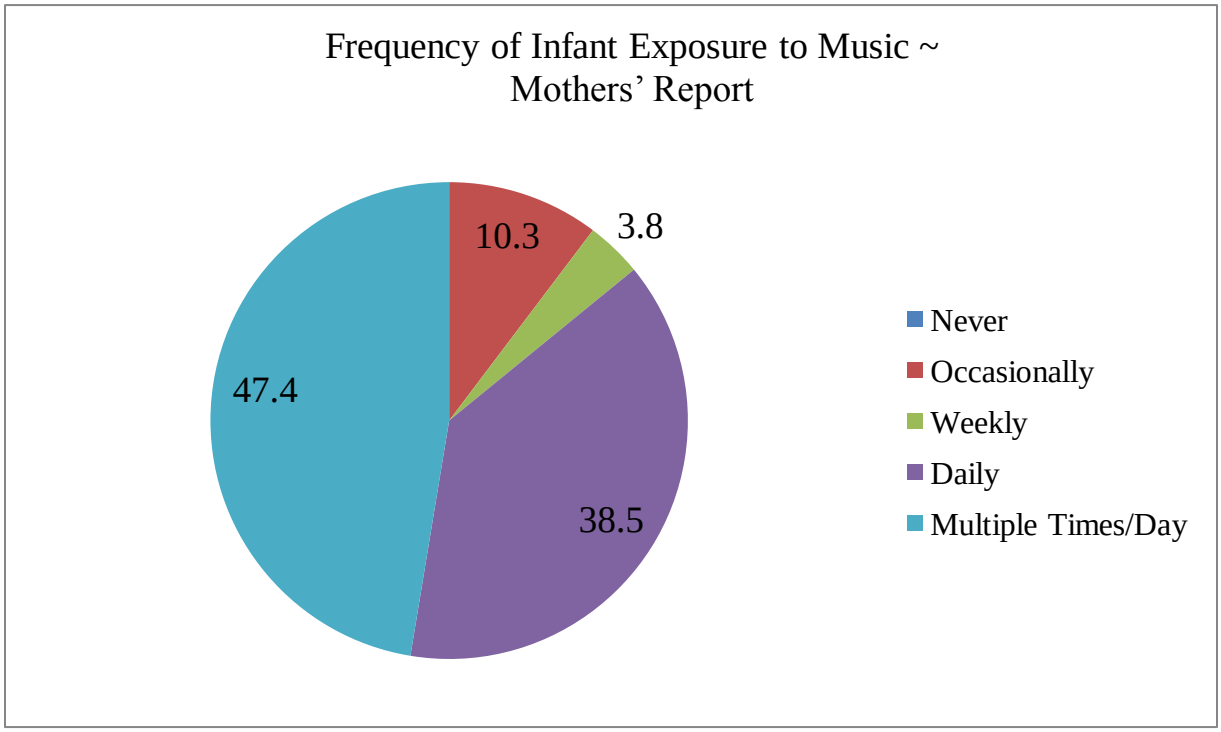

Figure 2

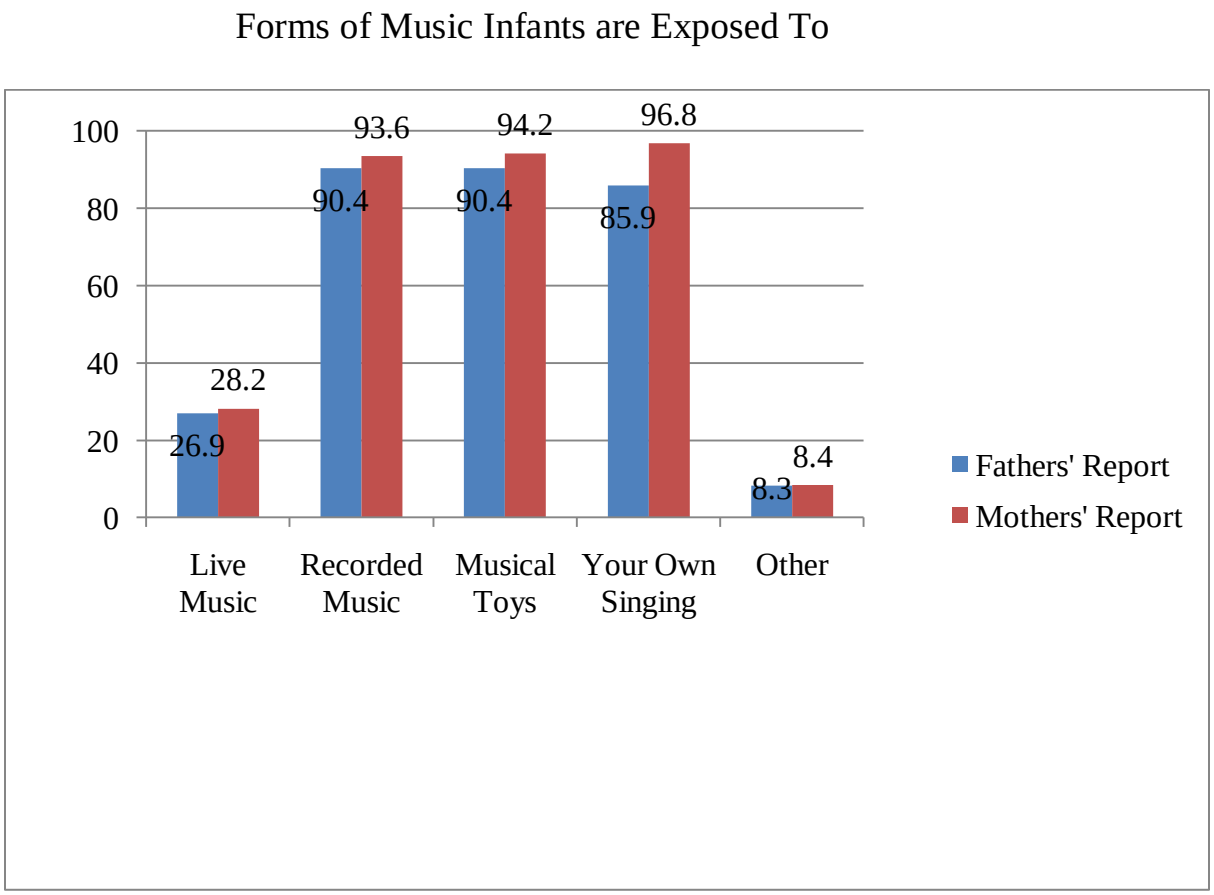
Forms of Music Infants are Exposed To
100
80
60
40
20
0
26.9
28.2
90.4
93.6
90.4
94.2
85.9
96.8
8.3
8.4
Live Music
Recorded Music
Musical Toys
Your Own Singing
Other
Fathers' Report
Mothers' Report

Figure 3

Types of Music Infants are Exposed To

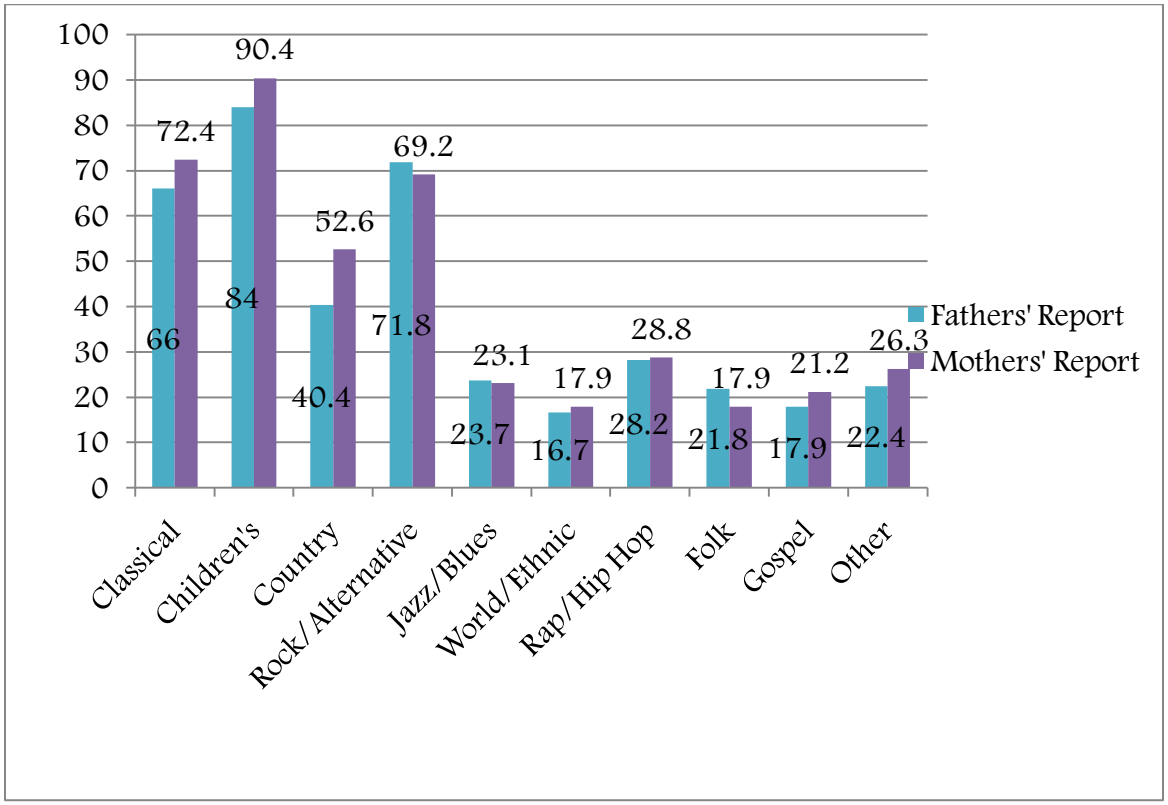

Figure 4

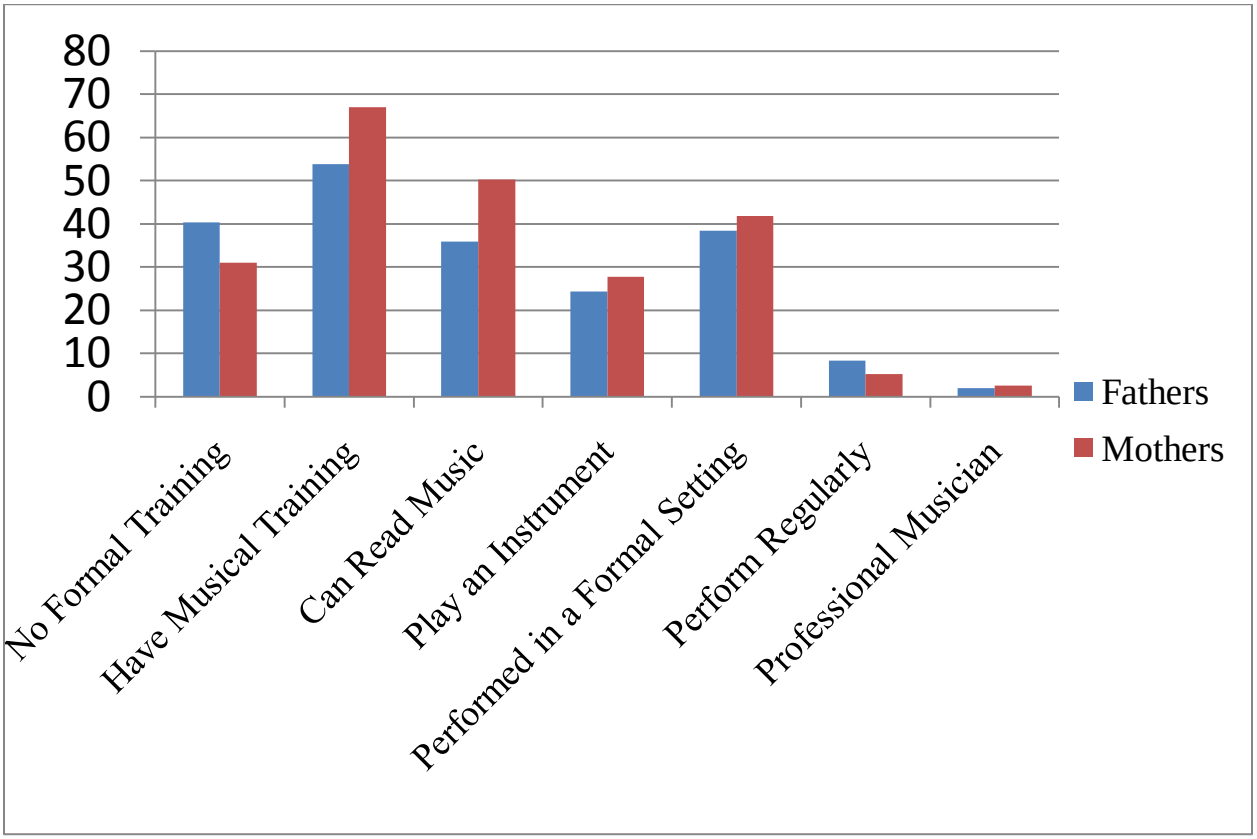
Parental Musical Background
80
70
60
50
40
30
20
10
0
No Formal Training
Have Musical Training
Can Read Music
Play an Instrument
Performed in a Formal Setting
Perform Regularly
Professional Musician
Fathers
Mothers

Figure 5

Appendix

1. How important do you think music is in the development of your child?

Not at all Important Fairly Unimportant Fairly Important Very Important

2. How often do you intentionally expose your baby to music?

Never Occasionally Weekly Daily Multiple times a day

3. Check all forms of music your baby is exposed to:

____ Live music
____ Recorded music
____ Musical toys
____ Your own singing
____ Other: _____

4. What types of music is your baby exposed to? Please check all that apply.

____ Classical
____ Children's
____ Country
____ Rock/Alternative
____ Jazz/Blues
____ World/Ethnic
____ Rap/Hip-Hop
____ Folk
____ Gospel
____ Other: _____

5. Did you intentionally expose your baby to music before he/she was born?

Yes (e.g. singing, recorded music, etc.)
No, I never purposefully exposed my baby to music

6. Describe your own musical background/training. Please check all that apply.

____ No formal musical training

____ I have had musical instruction (e.g. choir, piano lessons, etc.)

____ I can read music

____ I can currently play an instrument with proficiency (or I am a trained singer)

____ I have performed in a formal setting (e.g. orchestras, garage bands, choirs, etc.)

____ I currently perform regularly (e.g. solo performances, community groups, etc.)

____ I am a professional musician